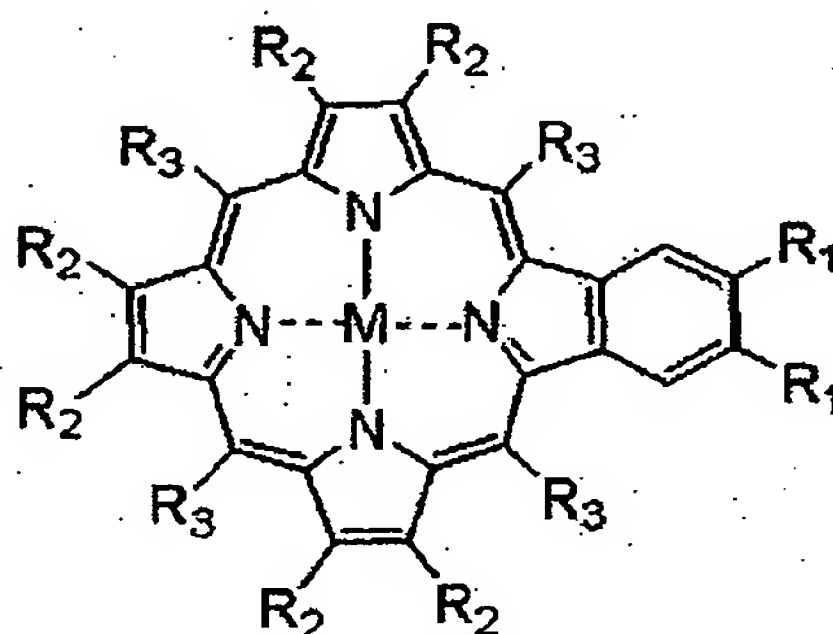


ABSTRACT

A field effect transistor is provided which comprises an organic semiconductor layer comprising a compound having a monobenzoporphyrin skeleton represented by the general formula (1):



wherein R_1 and R_2 are independently selected from the group consisting of a hydrogen atom, a halogen atom, a hydroxyl group, and alkyl, alkenyl, oxyalkyl, thioalkyl, alkyl ester and aryl groups each having 1 to 12 carbon atoms with the proviso that adjacent R_1 may be the same or different and adjacent R_2 may be the same or different and that at least two of R_2 are not hydrogen atoms; R_3 is a hydrogen atom or an aryl group; and M denotes two hydrogen atoms, a metal atom or a metal oxide.